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09/762,138	03/29/2001	Richard Flieger	KSN0009	8493

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EXAMINER
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ART UNIT	PAPER NUMBER
2833	

DATE MAILED: 07/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

(574) 239-1965
Eric Crown

Office Action Summary	Application No.	Applicant(s)	
	09/762,138	FLIEGER ET AL.	
	Examiner	Art Unit	
	Larisa Z Tsukerman	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2003 (RCE)* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on ____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☒ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1- 5 and 7- 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (4950183) in view of Hamai et al. (5441428) and DE 3629740.

In regards to claim 1, Watanabe discloses a socket contact (not labeled, Fig.1) comprising:

a base spring 12 and a backup spring 10,

the backup spring 10 enclosing the base spring 12 in a box-like manner with three walls and divided overlapped fourth wall (16,13),

a recess 17 formed on the other wall section 16,

a connecting lug 13B formed on one wall section 13, passes through the recess 17 and bend over, and

wall sections overlap over the full length of the backup spring.

Watanabe lacks: (a) - **a discrete** backup spring (base and backup spring are separated members) and (b) - **two lugs** to connect overlapped portions of divided wall, which are bent.

Hamai et al. teaches **a discrete** backup spring 28 and a separate base spring 9 (see Abstract and Figs.1 and 4). DE 3629740 shows **two bent lugs** 28, 29 inserted into

corresponding **recesses** 30 (see Figs.1 and 6) to hold backup spring 6 closed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the structure of Watanabe so as to include **a discrete** backup spring and two bent lugs of DE 3629740 in order **to replace** (damage) parts of the socket and **to provide** more steady and strong engagement between wall sections and maintain the box-like body 10 in a given shape.

In regards to claim 2, Watanabe, when modified by Hamai et al. and DE 3629740, discloses the connecting **lugs** 28, 29 are formed on the **lower** wall section and the **recesses** 30 are formed on the **upper** wall section (see Fig.6).

In regards to claim 3, Watanabe, when modified by Hamai et al. and DE 3629740) discloses one recess with a shape of an elongate hole (see Fig.1 and 6).

In regards to claim 5, Watanabe, when modified by Hamai et al. and DE 3629740, discloses the connecting lugs, after being bent over, are supported on the wall having the recesses, as claimed (see Fig. 6).

In regards to claim 4, Watanabe, when modified by Hamai et al. and DE 3629740, discloses the invention substantially, as claimed, except for one recess is formed as U-shaped recess. However, as best as can be understood at this time, the recess formed as U-shaped recess is only considered to be an obvious modification of the shape and as the courts have held that a change in shape or configuration, without any criticality, is within the level of skill in the art as the particular shape claimed by applicant is nothing more than one of numerous shapes that a person having ordinary skill in the art will find

obvious to provide using routine experimentation based on its suitability for the intended use of the invention. See In re Dailey, 149USPQ 47 (CCPA 1976).

In regards to claim 7, reference DE 3629740 also shows a locking hook 36 which is cut out, bent outwardly from the first wall, extends in the longitudinal direction of the backup spring and locks a backup spring 6 into the isolative housing (not shown, see Col.5, lines 2-7). It would have been obvious to one of ordinary skill in the art to modify the structure of Watanabe so as to include the structure (locking hook) of DE 3629740 in order to lock the backup spring into the housing.

In regards to claim 8, reference DE 3629740 also shows a crank 31 having the material thickness of the lower section (see Figs. 1 and 2) to provide smooth insertion of lugs 28,29 into recesses 30.

It would have been obvious to one of ordinary skill in the art to modify the structure of Watanabe so as to include the structure (crack) of DE 3629740 in order to facilitate insertion of lugs 28,29 into recesses 30.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (4950183) in view of Hamai et al. (5441428) and DE 3629740, as applied to claims 1 and 5 above, and further in view of Seko (EP0837529). Watanabe disclose the invention substantially as claimed, except for notches on the upper side of the connecting lugs. However, Seko shows notches 62 on lugs 22 (see Fig.14) so as to fit tightly into recess 23 (see Col.7, lines 3-5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the structure

(lugs) of Watanabe so as to include the structure (lugs with notches) of Seko in order to fit lugs tightly into recess.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (4950183) in view of Hamai et al. (5441428) and DE 3629740, as applied to claims 1 and 2 above, and further in view of Myer (5624273). Watanabe discloses the invention substantially as claimed, except for a polarizing member is formed on the lower wall section. However, Myer shows a polarizing member 27 formed on the lower wall section and inserted into groove 68 to prevent a force tending to separate backup spring 20 from the housing. It would have been obvious to one of ordinary skill in the art to modify the structure of Watanabe so as to include the structure of (add a polarizing member) of Myer in order to prevent a force tending to separate backup spring from the housing.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (4950183) in view of Hamai et al. (5441428) and DE 3629740 as applied to claim 1 above, and further in view of Egenolf (5246390). Watanabe discloses the invention substantially as claimed, except for folding legs are formed on the opposing walls of the backup spring being adapted to be bent inwardly and engaging in the corresponding openings on the base spring. Egenolf shows folding legs 77 and 79, and openings 82 to mount the backup spring 13 on the base spring 11(see Figs. 1 and 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the structure of Watanabe so as to include the

structure of Egenolf (folding legs) in order to mount the backup spring on the base spring.

Claims 11 - 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kakuta et al. (5775962) in view of German Patent (G92 01 047. 4).

In regards to claims 11-13, Kakuta disclose a base spring 4, a box-like discrete backup spring 1 having divided overlapped fourth wall (7+7a, 7'+ 7a') with a connecting lug 7b being bent and formed on the lower wall section (7+7a), and a recess 9 being formed on the upper wall section (7'+7a') and has a shape of an elongate hole. However, Kakuta lacks **a discrete** backup spring (base and backup spring are separated members) and two lugs with complementary recesses in the front and rear portions of the wall. German Patent (G 92 01 047.4, Figs, 20 and 21) shows two connecting points (lugs 55 and 56 with complementary recesses 53 and 54). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the structure of Kakuta so as to include **a discrete** backup spring and two connecting points (two lugs and recesses) in the front and rear portions of the wall, as taught by German Patent, in order **to replace** (damage) parts of the socket and **to provide** more steady and strong retaining means between wall sections.

In regards to claim 15, the connecting lugs, after being bent over, are supported on the wall having the recesses.

In regards to claim 14, Kakuta disclose the invention substantially as claimed except for one recess is formed as U-shaped recess. However, as best as can be understood at this time, the recess formed as U-shaped recess is only considered to be an obvious

modification of the shape and as the courts have held that a change in shape or configuration, without any criticality, is within the level of skill in the art as the particular shape claimed by applicant is nothing more than one of numerous shapes that a person having ordinary skill in the art will find obvious to provide using routine experimentation based on its suitability for the intended use of the invention. See In re Dailey, 149USPQ 47 (CCPA 1976).

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kakuta et al. (5775962), Hamai et al. (5441428) and German Patent (G92 01 047. 4), as applied to claims 11 and 15 above, and further in view of Seko (EP0837529). Kakuta disclose the invention substantially as claimed except for notches on the upper side of the connecting lugs. Seko shows notches 62 on lugs 22 (see Fig.14) so as to fit tightly into recess 23 (see Col.7, lines 3-5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the structure (lugs) of Kakuta so as to include the structure (lugs with notches) of Seko in order to fit lugs tightly into recess.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kakuta et al. (5775962), Hamai et al. (5441428) and German Patent (G92 01 047. 4), as applied to claim 11 above, and further in view of Buddrus et al.(4934965). Kakuta discloses the invention substantially as claimed except for a locking hook extending in the longitudinal direction of the backup spring is cut out and bent outwardly from the first wall. Buddrus shows a locking hook 57 (see Fig. 1) that locking a backup spring 50 into the housing (not shown, see Col.5, lines 33-38). Therefore, it would have been obvious

to one of ordinary skill in the art at the time the invention was made to further modify the structure of Kakuta so as to include the structure (locking hook) of Buddrus in order to lock the backup spring into the housing.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kakuta et al. (5775962), Hamai et al. (5441428) and German Patent (G92 01 047. 4), as applied to claims 11and 12 above, and further in view of DE 3629740. Kakuta discloses the invention substantially as claimed except for a crank having the material thickness of the lower section. However, DE3629740 shows a crank 31 having the material thickness of the lower section (see Figs. 1 and 2) to provide smooth insertion of lugs 28,29 into recesses 30.

Therefore, it would have been obvious to one of ordinary skill in the art to modify the structure of Kakuta so as to include the structure (crack) of DE 3629740 in order to facilitate insertion of lugs 28,29 into recesses 30.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kakuta et al. (5775962), Hamai et al. (5441428) and German Patent (G92 01 047. 4), as applied to claim 11 above, and further in view of Myer (5624273). Kakuta discloses the invention substantially as claimed, except for a polarizing member is formed on the lower wall section. Myer shows a polarizing member 29 formed on the lower wall section and inserted into groove 64 to control the contact when it is inserted into the housing. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the structure of Kakuta so as to include a

polarizing member as taught by Myer in order to control/guide the contact when it is inserted into a connector housing.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kakuta et al. (5775962) and German Patent (G92 01 047. 4) as applied to claim 11 above, and further in view of Egenolf (5246390). Kakuta discloses the invention substantially as claimed, except for folding legs are formed on the opposing walls of the backup spring being adapted to be bent inwardly and engaging in the corresponding openings on the base spring. Egenolf shows folding legs 77 and 79, and openings 82 to mount the backup spring 13 on the base spring 11(see Figs. 1 and 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the structure of Kakuta so as to include the structure of Egenolf (folding legs) in order to mount the backup spring on the base spring.

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larisa Z Tsukerman whose telephone number is (703)-308-6038. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A Bradley can be reached on 703-308-2319. The fax phone numbers

for the organization where this application or proceeding is assigned are (703)-308-7722 for regular communications and (703)-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.

L.T.
July 28, 2003

THO D. TA
PRIMARY EXAMINER